Background

Cancer is the second leading cause of death in the United States and in the State of Nebraska. In the US, approximately 1,248,900 new cases were expected to be diagnosed in 2002 and about 555,500 Americans were expected to die of cancer, more than 1,500 a day. Everyone is potentially at risk for developing cancer although the occurrence increases in middle age. The American Cancer Society indicates that 77% of all cancer is diagnosed at age 55 and older. In the US, the lifetime risk of developing cancer is a little more than 1 in 3 for women and a little less than 1 in 2 for men. In Lancaster County, 20%-25% of all deaths are linked to cancer every year. In recent years (1999, 2001), however, deaths due to cancer have surpassed deaths due to heart diseases – the leading causes of death in the US and the State. This shift in the death trend in the county emphasized a need for epidemiological assessment of cancer incidence. This summary report provides the most recent data on cancer incidence and mortality in the residents of Lancaster County.

Lancaster County cancer incidence data for this report was obtained from the Nebraska Cancer Registry (NCR). NCR was established in 1986 and first began collecting data on people who were diagnosed with any benign or malignant tumor in 1987. Currently Nebraska Health and Human Services System (NHHSS) manages the NCR, and data collection and editing are performed by Nebraska Methodist Hospital of Omaha, under contract to the Nebraska Medical Foundation. Lincoln-Lancaster County Health Department receives county specific data directly from NHHSS.

Methodology & Data Analysis

Data on Lancaster County residents who were diagnosed and treated for malignant and in situ tumors was collected. However, all benign tumors, in situ and localized squamous cell carcinomas of skin were discarded from the registry. For cancer incidence, all primary cancer sites are coded according to the International Classification of Diseases for Oncology (ICD-O-2). Cancer mortality data for comparative analysis with the incidence rates were extracted from vital statistics data that Lancaster County receives annually from NHHSS. Deaths that occurred before 1999 were coded with the Ninth Edition of the International Classification of Disease (ICD-9) and deaths recorded in or after 1999 are coded with Tenth Edition of the International Classification of Disease (ICD-10). Cancer incidence and mortality data for the U.S were obtained from the most recent annual statistical report published by SEER (Surveillance, Epidemiology, and End Results) program and those for she State of Nebraska were from "Cancer Incidence and Mortality in Nebraska: 1999" published by NHHSS in June 2002.

Cancer incidence and death rates presented in this report are based on data from 1990 to 2001. Since population differ from one another with respect to their age distribution, and because disease also varies by age, incidence and death rates are "adjusted" to a standard population to allow comparisons. All crude incidence rates and death rates for each year were adjusted for age differences in population in order to have a valid comparison between the County, State and the Nation. As the 2000 US standard million population has been designated as the new standard for all age-adjusted rates, to assure data consistency, this new standard population was used for age-adjustment of all cancer incidence and mortality rates presented in this report.